Growing trees successfully depends on the selection of the right trees for the intended site. It is important to match the growing conditions and space available on the site with the needs and projected size of each tree to be planted. Check local regulations for tree selections and planting locations in public areas. The following four charts show the tolerances of individual trees to various environmental conditions as well as the major landscape attributes of each tree. Not all recommended trees for planting in south central Kansas are included. The trees listed here are those species preferred for planting in the south central part of the state by the South Central Kansas Urban Forestry Council. For more details on how to benefit from the charts, see the key at the top of the next page.

KEY TO USING THIS INFORMATION

TREES SPECIES: Names of the tree species are listed in the center of four different charts. Three list deciduous trees according to average mature height [a plus (+) indicates they may grow slightly larger]. The fourth chart lists evergreen trees. Improvements of the species in varieties (var.), cultivars (cultivated varieties) (cv.) and trade names (TN) are listed when available. They often possess improved plant characteristics like better fall color; a unique form, more attractive flowers, fruit or bark; greater heat tolerance; or increased pest resistance.

ENVIRONMENTAL TOLERANCES: The left side of each chart indicates whether the tree species is tolerant to various environmental conditions including full sun, light shade, alkaline soil, drought and wet soil. Each chart also shows how resistant each tree is to insect and disease pests. Two asterisks (**) listed under the appropriate column indicate the tree is strongly tolerant of the characteristic indicated. One asterisk (*) signifies that the tree shows some tolerance. A blank space () in a column indicates the tree is not tolerant; do not plant, or plant only if the tree's limitations are carefully managed. Specific information on the 'alkaline soil' and 'pests' categories follows:

ALKALINE SOIL:(**) = tree may tolerate soils with a pH up to 8.0 or more; (*) = tree generally will tolerate an alkaline soil up to a pH of 7.5; () = tree may not tolerate alkaline soils; do not plant in alkaline soils to avoid the problem of iron or manganese chlorosis.

PESTS: (**) = tree is usually free of insect and disease problems; (*) = tree encounters insect or disease pests on an infrequent basis and often is not permanently damaged; () = the tree may exhibit minor insect and disease problems on a frequent basis which may affect the aesthetics of the tree AND/OR the tree may suffer from pests which may permanently damage or kill the tree OR insects may commonly be a nuisance. No tree is 100 percent immune to all pests. Trees in this category are still preferred species for planting.

LANDSCAPE ATTRIBUTES: The right side of each chart includes the average mature height and spread of each tree. The size is sometimes highly variable due to the size and shape of different cultivars planted and different growing sites. The landscape attributes of flowers, fruit, autumn color and ornamental bark are also listed.

DESIRABLE FLOWERS: (**) = the flowers are showy, adding definite ornamental interest to the landscape; (*) = the flowers are not particularly showy, but may possess other desirable characteristics such as fragrance; () = the flowers are generally considered insignificant.

SHOWY OR USEFUL FRUIT: (**) = fruits are generally aesthetically pleasing; (*) = fruits or nuts are not considered unusually showy, but may provide other interest or benefits such as attracting wildlife.

AUTUMN FOLIAGE COLOR: (**) = the autumn leaf color is usually quite good (may vary with individual trees and cultivars, however); (*) = the fall color may provide some interest in some seasons; () = autumn foliage color is generally not an asset of this particular tree.

ORNAMENTAL BARK: (**) = the bark or twigs are considered to be exceptionally ornamental; (*) = the bark or twigs (on at least some cultivars) lend interest to the landscape (good color, texture, etc.); () = the bark or twigs are not generally considered unusually ornamental.